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Irish H & V News

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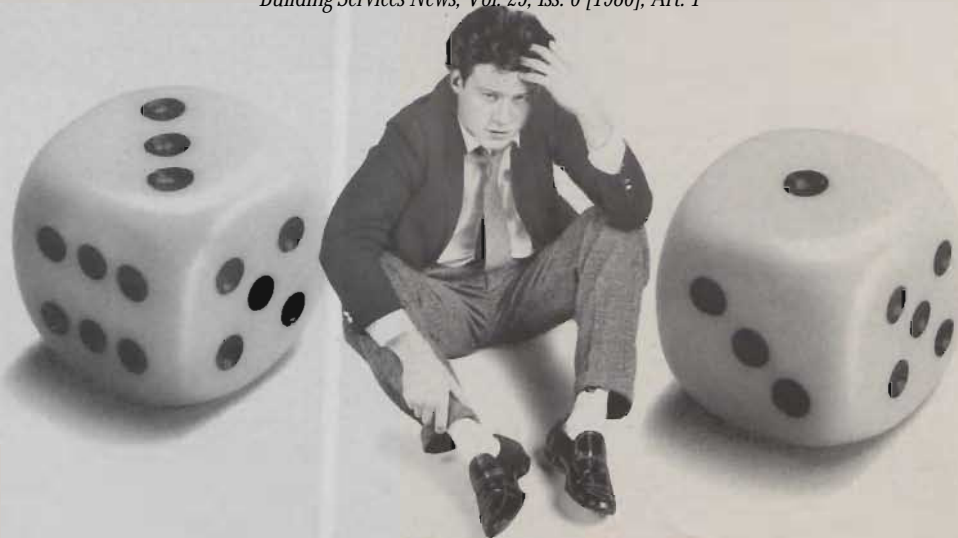
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IRISH H&V NEWS

NOVEMBER/DECEMBER 1986 IRELAND'S BUILDING SERVICES MAGAZINE



**Seasons
Greetings to
All Our Readers**



You can't afford to gamble when it comes to pumps! ●



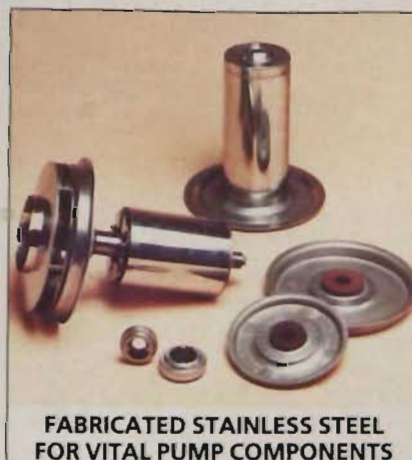
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Grundfos (Ireland) Limited, Unit 34, Stillorgan Industrial Park, Blackrock, Co. Dublin, Ireland. Telephone: 01 954 926. Telex: 90544.

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Gordon Barry and Dermot Murphy, Grundfos, with Bob Couchman, President, IDHE, prior to the drawing of the winning ticket in the recent contractor/merchant competition run by Grundfos (see page 6).

IRISH H&V NEWS

IRELAND'S BUILDING SERVICES MAGAZINE

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environmental engineers and
building merchants in the 32
counties of Ireland.

ABC

NEWS DESK



• Edward Quinn, Chairman of the Quantity Surveying Division, Society of Chartered Surveyors, presents the client brochure, "If You Need to Build ... You Need a Chartered Quantity Surveyor", to the Minister for Finance, John Bruton Ltd.

Guide To Value For Money In Construction.

THE Minister for Finance, John Bruton TD, was recently presented with a newly-published guide on how to ensure value for money in construction projects.

The client brochure, "If You Need to Build ... You Need a Chartered Quantity Surveyor", has been published by the Society of Chartered Surveyors to advise Government Departments, Local Authorities and private clients on how to ensure value for money in building and engineering construction projects and to explain the many services provided by Chartered Quantity Surveyors.

The cost of construction projects, their management and the co-ordination of the many consultants and specialists involved are all key problem areas for the client considering a building or engineering project.

The Chartered Quantity Surveyor is the expert professionally trained and experienced in dealing with these problems and in the application of life cycle costing, a technique which provides an analysis of capital costs of expenditure as well as the total costs of regular items of expenditure such as cleaning, fuel, maintenance, insurance, management and interest charges.

Presenting the report to the Minister, the Chairman of the Society's Quantity Surveying Division, Edward Quinn, said: "The necessity for sound cost budgeting and cost management is vital and the building client requires, and must get, good value for money — a position most likely to be achieved through utilising the skills and experience of the Chartered Quantity Surveyor".

Grundfos Managerial Change

FOLLOWING the departure of General Manager Dermot Murphy from Grundfos (Ire) Ltd earlier this month, Acting General Manager David Fookes says that the trading policies, management style and industry presence as projected by Mr Murphy will remain unaltered.

Mr Murphy's departure coincides with the completion of the Grundfos consolidation programme of the last few years which has seen the company establish a substantial market

share for itself in the highly-competitive pump sector.

Mr Fookes paid tribute to Mr Murphy in bringing about this situation and wished him well — on behalf of the directors of Grundfos both in the UK and Denmark — in his new position.

As for his replacement, Mr Fookes said that a short-list of potential candidates had now been drawn up and that the new appointee would be taking up his role as General Manager, Grundfos (Ire) Ltd in the early part of 1987.

Tom Fleming goes it alone

AFTER a significant number of years with the Reconair Group, Tom Fleming has finally left to set up his own operation — Irish Air Conditioning Systems Ltd, 21 Castleknock Oaks, Dublin 15, (Tel: 211688).

He has been out on his own for some months now but it is only in recent weeks that he has begun to trade in earnest. His principal agency is a formerly-held Reconair name — Denco Air — for which he is now entirely responsible in the Republic of Ireland.

Tom told *Irish H&V News* that from as far back as last Christmas he had been looking to make such a move but it was

only in the latter stages of this year that it became possible. He had certain commitments to Reconair which he needed to fulfill and his final parting with Fred Cooney of same was an amicable, agreed split.

Irish Air Conditioning Systems Ltd is geared towards offering customers the complete service from the initial supply of equipment right through to the installation, commissioning and after-sales maintenance.

As a complementary service, Tom is also selling the McQuay range on behalf of Sean McCarthy of SMC Air Conditioning.

Thermplant — Liquidator Appointed

AT a meeting of the creditors of the Thermplant Group of companies on 11 November last all four companies were liquidated with Michael Gribben of Michael Gribben & Associates being appointed liquidator.

While there are four companies involved, *Irish H&V News* has been led to believe that they each were separate limited companies and were not owned by any holding concern. Apparently, certain inter-trading did take place but, with the dearth of information forthcoming on the matter, it's difficult to determine or quantify.

The four companies involved were Thermplant Gas Ltd, Thermplant Combustion Ltd, Thermplant Holdings Ltd and EMS Ltd. As we went to press the only figure we could determine was that for Thermplant Gas Ltd, where the deficit is said to be £285,000.

A spokesman for the liquidator said he was not in a

position to disclose the various sums owed to individual companies but he did indicate that over half the sum mentioned above is owed to the Revenue Commissioners.

Other sources revealed that the rest is made up of Oertli — owed approximately £34,000; Kromschroder — owed approximately £16,000; IMAC — owed approximately £26,000; and Babcock Boilers — owed approximately £12,000; and a mix of others.

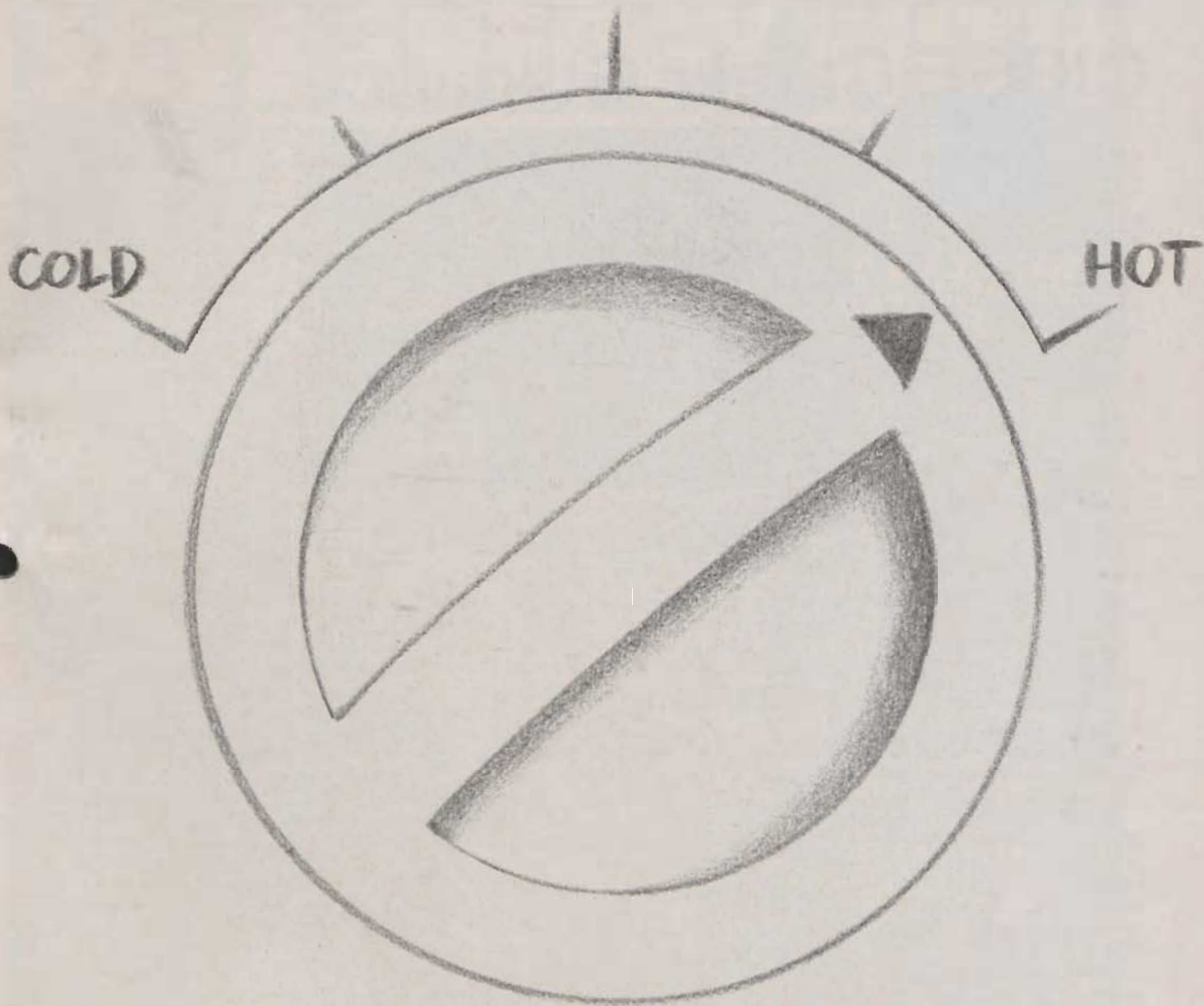
At the time of going to press we could get no confirmation of the amounts outstanding with regard to Thermplant Combustion Ltd, Thermplant Holdings Ltd or EMS Ltd.

The liquidator is currently assessing the situation but the outlook for creditors looks fairly grim.

A Committee of Inspection has been appointed and the members will be monitoring the liquidator's progress over the coming weeks.

HUGH MAGUIRE MOVES

WELL-known consulting engineer Hugh C Maguire has moved address and asked us to inform those wishing to contact him that he can now be found at Apartment 72, The Elms, Mount Merrion Avenue, Blackrock, Co Dublin. His telephone number remains the same at 888384.



Electric heat pumps blow hot and cold to save you money.

If you're in business, you can manage better with electricity. For lighting, naturally, for keeping computers computing and for totting up at the end of each day. And clean, convenient electricity helps to create a more pleasant, working environment for customers and for staff. Electric heat pumps, for example, provide heating and cooling giving you hot air in winter and cool air in summer.

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You can install electric heat pumps anywhere, on the roof or on the wall and they are suitable for all types of business premises, from banks to boutiques, offices to restaurants and a whole lot more. No fumes, no fuss, just a flick of a switch, simplicity itself. And that's not just a lot of hot air! Find out more about electric heat pumps by contacting your local ESB Office or phone the ESB Commercial Advisory Service at (01) 765831, Ext. 7236.

CIBSE Career Guidance

LAST month a presentation was arranged for the engineering students in the College of Technology, Bolton Street, by the Chartered Institution of Building Services Engineers in Ireland, the purpose of which was to attract more and better-quality young engineers to the industry.

Speakers were arranged from different building services disciplines in order to show students the full spectrum of the industry.

The first speaker was Mr Sean Mulcahy, BE CEng FIEI MIEE FCIBSE MConsEI. He spoke on the role of the consulting engineer in the design process and covered aspects of the role in the past, present and as it might be visualised in the future. Mr Mulcahy emphasised the design team as the group who must work together as architects, engineers and specialists in the design of modern buildings.

Michael J Curley, MASHRAE, MIMgtI, spoke from the viewpoint of the mechanical contractor. He spoke about general management principles and management psychology and outlined how these principles are applied in the management of a modern business.

Hugh Fortune, MIIM, read a paper on medical gases and



• Speakers at the 2-day CIBSE career guidance presentation were: Tom Scott; Don Byrne; John Connolly; George O'Neill; Gerry Curran; Paddy Clonan; Eoin O'Cionna, President CIBSE; Michael Buckley; P.J. Doyle; Oliver McNulty, and Des Doyle.

industrial gases. He emphasised the need for standards of design to be established in Ireland as they apply in other parts of the world. He also spoke on typical design faults and hazards encountered in Irish Hospitals.

Michael Buckley, MCIBSE, spoke on air handling plant and heat pumps. He spoke as a marketing man but his paper was a technical one outlining the selection of air handling units and equipment.

Michael Lynch, MCIBSE, also spoke on air handling plant. He discussed selection of equipment and also spoke on attenuators, fan sections,

mixing dampers, filters, heat transfer coils and humidification.

Gerry Curran, MASHRAE, Temperature Control Services Ltd, outlined the history of automatic controls in Ireland while Larry Kane, MIHE, MASEE, MIED, read a paper on the role of the building officer/property manager and gave a very good overview of the office management in Ireland.

Paddy Clonan, FCIBSE, Chairman of CIBSE, spoke about managing and running a mechanical contracting firm and was followed by Mr JJ Connolly, BE CEng MIEI FIFireE who read a paper on fire

protection. George O'Neill, MCIBSE, MILE, spoke on lighting in building services and gave a very good paper with the help of slides with Mr M Reid of Precision Electric (I) Ltd, following on with a paper on electrical contracting. This was a blow by blow description of all the areas in running a business starting with historical background, looking at the process of estimating work and working right through the various activities to handing over the project.

Tom Scott of Hevac Ltd read a paper on boiler plant and equipment with Des Doyle, FRIAI MSKE, reading the closing paper which gave an overview of building design in modern times and outlining the role of the engineer and architect. He identified engineering as part of the process of architecture — both structural work and services.

This two-day event was organised by Mr PJ Doyle, Education Officer, CIBSE. The response from both the college authorities and the students would suggest that it was a very successful event.

COMING EVENT: Celebrity lunch at the Deepark, Clonsilla. Guest speaker is Vincent McArdle, McArdle, McSweeney O'Malley.



• Vincent Dillon has been appointed Director & General Manager of Electronic Rent Ltd., and Euro Instruments & Electronics Ltd., the Dublin based companies, specialising in the rental and distribution of computer and electronic equipment.

Dan Chambers Appointee

DERMOT Murray, previously with Climate Engineering Ltd., has joined Dan Chambers Ltd. He is now based at the company's Brunswick Street office in Dublin 7.

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Fire Prevention

AT a reception to coincide with the opening of the annual Fire, Safety & Security Exhibition in the Burlington Hotel on October 22/23 last, Apex Fire Prevention Co Ltd introduced several new products.

Cerberus Ltd: This leading manufacturer has recently appointed Apex Fire Prevention as their Irish distributor. On show were their fire detection systems, which are presently being installed in some major contracts.

Allied Safety Ltd: This

company has recently appointed Apex Fire to market their fire fighting equipment here. Displayed was an impressive range of cartridge and stored pressure fire extinguishers, all made to BSI Standards. John Brett and Tony Gordon were present to meet their Irish customers.

B A Beadle Ltd: A mobile display unit was on hand to promote their hydraulic and pneumatic cutting equipment and industrial safety gear.

Ring Lighting Ltd: This manufacturer of emergency lighting equipment showed the unique "flashpoint" testing technique, which any lay person can perform on their lighting boxes, with the aid of torch.

Sieli Ltd: Another of Apex Fire Prevention's sole conces-

sionaires, Sieli showed new stored pressure powder, together with a full range of Cartridge Operated Fire Extinguishers, including the light water model G P 9 A.

Justrite Ltd: On view were their flammable liquid containers and dispensing apparatus.

Safety Unlimited: This manufacturer displayed fire resistant, fire-proofed cabinets plus safety vessels.

Macron Ltd: Fire fighting flat hose together with a new industrial hose were shown, with the industrial hose being very keenly priced.

To complete the extensive and impressive array of fire fighting, detection and ancillary products displayed on the Apex Fire Prevention Stands, Bristol Uniforms displayed their equipment which included firemen's helmets.

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TO HEATING
PROBLEMS

NEWS DESK

Grundfos holiday winners

AT a reception/contractor evening at the Grundfos headquarters in Stillorgan recently Bob Couchman, IDHE President, brought the Grundfos-sponsored contractor/merchant competition of the last two months to a close by drawing the winning ticket.

Lucky winners were Malahide contractor Noel Cullen with Shay Kiernan of Heating Distributors being the merchant involved. Both receive a two-week holiday for two in the Canaries, plus £100 spending money.

The competition ran for approximately three months and literally hundreds of entries were received. Then, on the evening of 17 October last, a reception was held in Stillorgan at the Grundfos premises at which Bob Couchman drew the winning ticket. Afterwards there were refreshments served to the large attendance.

From a Grundfos point of view the competition proved particularly worthwhile with sales of domestic pumps up considerably on the same period last year.



• Bob Couchman, President IDHE with Bill Penrife, Hon. Secretary, IDHE and Dermot Murphy, Grundfos.



• Gordon Barry, Grundfos (centre) congratulating Malahide heating contractor Noel Cullen on his winning of the Grundfos sponsored holiday for two (including £100 spending money) competition which was run specially for domestic heating contractors over the last few months. On the left is Shay Kiernan of Heating Distributors. He also receives a holiday for two, being the named supplier to Mr Cullen on the competition entry form.

IDHE News

THE Institute's latest technical lecture was held (on 12 November last), as always, at 22 Clyde Road in the Engineers Club and the topic for the paper presented — by Gordon Barry, Technical Sales Engineer with Grundfos (Ire) Ltd — was "Pumps and Their Application in Central Heating Systems".

The evening turned out to be an unqualified success with a "standing room only" attendance of 75 people. Those present represented a healthy cross-section of the entire industry and included New Dublin Gas engineers, IDHE members, Heating and Plumbing Contractors Association members and a great number of full time building services students from Bolton Street. Also present were students on the IDHE E60 course. Indeed, on the night the IDHE enrolled 20 new student members.

The lecture itself was ably delivered by Gordon Barry who



• Barry McDonnell, Staff Engineer, Consumer Service Department, new Dublin Gas with IDHE Chairman Harry Pattison; Honorary Secretary Bill Perrice; and Gordon Barry, Technical Sales Engineer, Grundfos (Ire) Ltd, who presented the paper on heating systems and the role of the circulating pump.

used slides and two 15-minute video tapes — which were most entertaining — on "how to" and "how not to" install circulating pumps.

The IDHE would like to thank Don Byrne, Head of Engineering, Bolton Street, for his co-operation in encouraging the students to attend and also his assistance in helping IDHE Education Officer Joseph

Hogan get the E60 course off the ground.

See how Glow-Worm make a spectacle of themselves

AN unusual and innovative direct mail "shot" has just been posted by C & F Ltd, to over 18,000 homes in the Dublin and suburban areas.

Following the successful launch last month of the new Glow-worm Co-Ordinate range of gas-fired back boilers, C & F and their supplier — Glow-worm — have quickly followed up with this mailing (see insert) which will inform a sizeable number of people of the immediate availability of the six back-boilers, designed with eye-catching fire fronts in the new Co-Ordinate collection.

The novel mail shot comprises three full-colour illustrations of Glow-worm back-boilers — the LFC and the LFL and also includes a pair of cardboard 3-D spectacles, while the next emphasises the many benefits of these Glow-worm boiler units.

When one looks through the 3-D glasses, one can see the flickering flame, log-effect of the fire front of each boiler. Very realistic and convincing. As the mailing says, "the Glow-worm Co-Ordinate back boilers and fires are well worth looking into".

All one need do is complete the reply paid tear-off card (postage paid) to C & F Ltd at Chapelizod Industrial Estate, Dublin 20, and the person receives a Co-Ordinate brochure, a stylish red Glow-worm Kitchen Apron, together with the name, address and phone number of a nominated installer.

"We expect considerable interest plus a positive response to this Glow-worm direct mail shot", commented a spokesman for C & F Ltd.

RS Pumps Appointee

SJ Electro Systems Inc. have announced the appointment of RS Pumps Ltd, as their UK and Irish distributor.

RS Pumps will be holding stocks of all float switches, tank alerts and alternator systems manufactured by SJ Electro.

RS Pumps Ltd are located at Napier Street, Linwood, Renfrewshire, PA3 3AN., Scotland.

NEWS DESK

Buyer found for Pioneer Radiant

PIONEER Radiant Ltd. of Kenmare, which was put into receivership last September, has been bought by Detroit Radiant Products Ltd, one of the largest manufacturers of radiant gas heaters in the US.

When Pioneer Radiant was first established in 1972, the radiant gas heaters being manufactured were based on the designs and technology developed by Detroit Radiant. They were sold under the Re-Verber-Ray brand name and this association has been continued in that the new company's trading name is Re-Verber-Ray (Europe) Ltd.

The £200,000 deal has only just been completed and as yet it's too early to expect the new company to talk about the numbers to be employed or the type of marketing strategy which will be adopted.

However, what has been confirmed is that former employees will be given

preference as and when new positions become open but for the moment a holding operation is in force until all the details are sorted out.

It is also known that the intention of the new owners is to use the Kenmare plant, not just to supply and service the Irish market, but also to spearhead its newly-formulated plan of attack for Europe.

The manufacturing capacity of the plant and machinery now at the disposal of the newly-established Re-Verber-Ray (Europe) Ltd is extensive and, when this is coupled with the highly-professional and ultra-modern management style of the new owners, it will present a formidable force to all competitors.

Distribution of these high-efficiency heaters will be ex-stock with a 24-hour delivery promised for anywhere in Ireland. Sales will be via the established Detroit Radiant

method which is based on a formula of appointed distributors.

This will not present much of a problem for the new company since such a method was already being used by Pioneer. A comprehensive system of design and product back-up service is already available on a nationwide basis through Brian Mulhare & Associates in Dublin and Adrian Ryan who operates from a base in Limerick.

While there was a tenuous link between Detroit Radiant and Pioneer in that the designs of the appliances being produced by Pioneer were based on those of Detroit, the purchase of the company arose out of an advertisement placed by the receiver in the *Irish Times* and *Financial Times* in the UK. This generated quite a number of international enquiries and resulted in the final analysis in the deal struck with Detroit Radiant.

Thermpant Agencies go to Cahill

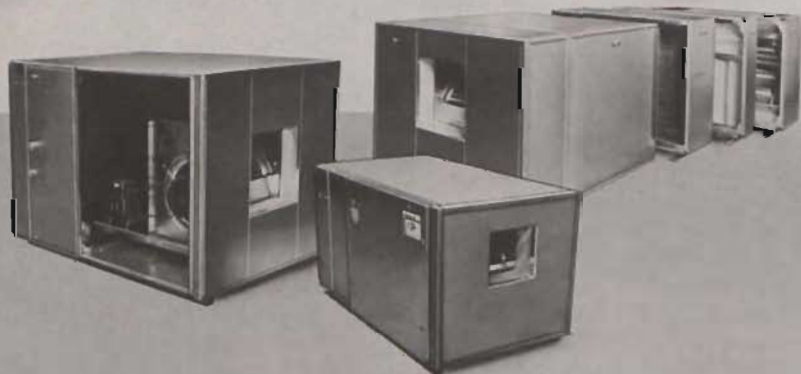
AS we went to press, Frank Cahill, formerly with the Thermpant Group of companies, confirmed to *Irish H&V News* that he now has the vast majority of the agencies previously held by his former employer.

Frank left Thermpant on 8 August last to set up his own company — Therm Savers Ltd — and has since seen his business grow while Thermpant's market share diminished to the point of the liquidation recorded on 11 November last (see page 2).

Therm Savers, which is based at Unit 2 on the Clondalkin Industrial Estate, Dublin 22, (Tel: 571029) now has the full range of appliances on offer from the following:-

Oerpli — Industrial gas burners; Kromschroder — Gas valves and associated accessories; Imac — Full range of industrial gas meters (turbine and rotary); Orseal — Gas Board-approved ball valves; and the full range of spares from Babcock Boilers.

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Roof Units Group VIKING air handling units comprising of the COMPACT, KDA and MINI ranges offers quality products manufactured to a high specification standard.

The Compact and KDA units are constructed of double skin design with 25mm thick mineral wool insulation between hot dip galvanised steel panels offering good thermal insulation combined with sound attenuation and fire resistance. The casings have smooth surfaces to facilitate easy cleaning.

A comprehensive range of ancillaries to facilitate specific air treatment requirements such as mixing, filtering, heat recovery, cooling, humidification, attenuation etc. are available.

A computerised selection service is provided to assist all enquiries.

Roof Units Group is a BS1 registered firm in accordance with BS5750 Part 1 for the design and manufacture of ventilation fans thus assuring that products are subjected to the rigorous BS quality control standards.

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NEWS DESK

Shires on the Acquisition Trail

SHIRES Bathrooms have launched a major initiative to achieve substantial growth with the acquisition of steel bath producer Carron Steelyne Ltd.

Carron, based in Faldirk, is the UK's leading manufacturer of enamelled steel baths and the move makes Shires the largest manufacturer of baths in the UK. The deal, for an undisclosed sum, was a private arrangement.

Shires believes the purchase of Carron is a logical progression that complements its present portfolio with the addition of a range of quality products to dovetail with Shires already extensive product portfolio of ceramic sanitaryware and acrylic baths.

Total annual turnover of Shires Bathrooms following the acquisition is put at £28 million with over 25% coming from export markets.

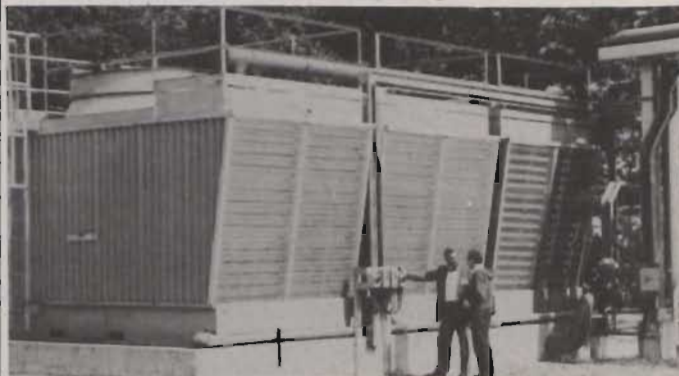
"Shires entry into the steel bath market sector follows the

company's extensive study of growth opportunities," said Brendan Whooley, Managing Director of Shires Ireland Ltd.

"We undertook a period of intensive research which clearly indicated the major potential in this sector. Steel baths are rapidly taking the place of cast iron products which have been rejected by distributors and installers on the basis of cost variable quality and inconvenience in handling" he said.

"The Carron Steelyne range is entirely complementary to Shires and it will significantly enhance the service offered to all sectors of the trade. This move underlines our stated determination to achieve substantial growth and expansion through acquisitions of business in complementary product sectors. In this regard, Shires Ireland Ltd hope to announce shortly, investment and acquisition plans for Ireland" added Mr Whooley.

Walker ... safely across the road



• Three of the Heenan Marley Cooling Towers at Elanco SA in Cork, where Walker Air Conditioning recently supplied and delivered the latest unit.

WHEN Elanco SA in Cork ordered a further Heenan Marley Cooling Tower from Walker Air Conditioning, its delivery could not be kept under wraps. It was the largest tower in the Heenan Marley range with a shipping weight of 4536 kg, measuring 2857 mm x 5886 mm x 3889 mm. This sizeable unit had to be transported by road across five counties from the

Port of Dublin to its destination at the Elanco production plant near Kinsale.

Walker were responsible for supply, delivery and commissioning of the equipment, which involved a great deal of planning and liaison with the various Local Authorities and even required closure of certain roads. However, Walker had the benefit of experience gained from delivering a similar unit to the same location in the previous year.

There are six identical Heenan Marley Cooling Towers on site, the initial two being specified in the original plant design from the USA in 1980. Two more were delivered direct about three years later because they had proved most reliable and completely trouble-free in operation. The towers are used for cooling large vessels in the production of antibiotics involving a crystallising process, a critical stage which has to be carried out at a controlled rate.

This particular installation is capable of handling a water quantity of 1740 gpm when cooling from 90°F to 80°F while operating in a wet bulb temperature of 65°F.

There are 14 packaged units in the NC range which can handle between 4800-12500 gallons/hr with refrigeration capacities from 100-800 tons. They are of induced draught cross-flow design, suitable for air conditioning applications as well as industrial processes. Ruggedly constructed with galvanised steel components and PVC coated galvanised steel cladding, they are more than equal to the rigours of outdoor installation giving a long working life with minimal maintenance requirements.

22mm
TWO PORT VALVE
22mm
THREE PORT VALVE

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NEWS DESK

Dan Chambers (Manufacturing) in Full Production



• Examining and checking one of the first fire dampers to be manufactured by the newly-established firm - Dan Chambers (Manufacturing) Ltd. - of Echlin Street, Dublin 8 are Dan Chambers, Managing Director (left) and Peter Coughlan, Production Manager.

THE recent Guinness explosion did not upset the newly-established company Dan Chambers (Manufacturing) Ltd. Although they lost some roof tiles from their recently-acquired premises in Echlin Street, in the shadow of the brewery, production of the glass fibre roof cowls, fire dampers and volume control dampers was only momentarily interrupted.

There has been considerable interest shown in the new range of fire dampers since their introduction at the recent H&V exhibition in Dublin. Manufactured in Echlin Street under licence from Fire Foil Ltd of Kent, the fire dampers are fully tested and certified and carry a "Made in Ireland" sticker.

Dan Chambers Ltd import an extensive selection of air

movement and ventilation equipment from the UK, Germany and Denmark. It has always been Dan's ambition to replace as many imported products as possible, with the home produced equivalent. This ambition has been largely achieved, where air distribution grilles and fibre glass roof cowls are concerned. As much as 95% of all grilles and roof cowls presently going through the Irish company are now home produced.

Fire dampers and volume control dampers are now being manufactured here. Previously, a sizeable percentage of costs went to transport companies. Now that these products are being made in Ireland, such monies can be diverted into salaries and home employment.

SMC gets Irish Life

ONE of the major contracts in central Dublin this side of Christmas — the complete retrofit of the Irish Life Abbey Street computer suite — has gone to SMC Air Conditioning Ltd. Won against stiff competition from the other leading experts in this field, the contract involves the replacement of the air handling unit with a Redbro model and the chiller with a McQuay 2-speed reciprocating unit with a 7 ton capacity.

The chill water pumps are also being replaced while the existing pneumatics are coming out in favour of a Honeywell Micronic 100 system.

SMC already has an established working relationship with Irish Estates Management, being responsible for nearly

seven years now for the maintenance of the computer suite in Abbey street. Additionally, the company has just completed a similar job on McGrattan House for Irish Life.

The Abbey Street retrofit is quite a significant contract in that it calls for an extensive degree of management in addition to technical know-how and expertise. The existing units will have to be dis-assembled on the roof and lowered to the ground level while the new replacements will also have to be hoisted to the roof in parts and assembled on site.

Work is scheduled to begin on 20 December with a completion date of early to mid-February of 1987 envisaged.

SMC are the main contractors for the project while Delap & Waller are the consultants.

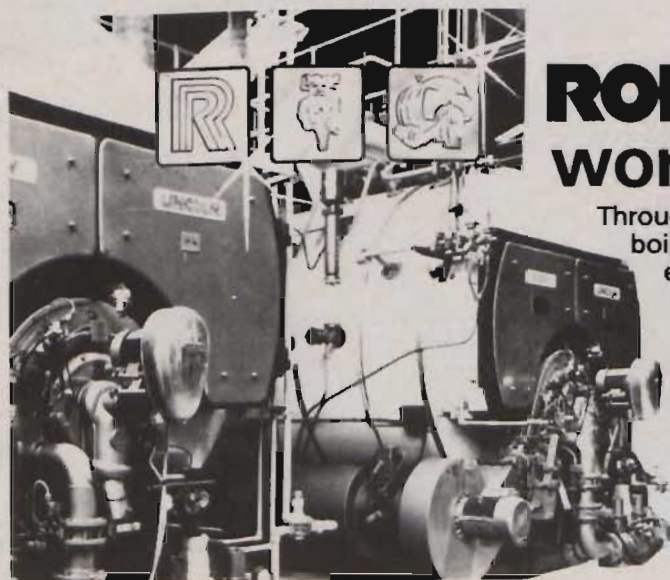
Energy Management Simplified

DAN O'Brien, BSc, from Killala, Co. Mayo, has devised a new product called Energy Manager which, simplistically speaking, is a software package for analysis of heating costs in the domestic sector. All aspects of heating are covered from fuels to insulation with a spreadsheet being produced which allows changes which can be compared to find the best paths to lower heating bills.

It works in several modes to allow for different degrees of expertise in the user and presently is designed for running on the Commodore 64. However, shortly it will be adopted to run on other machines.

It is very professionally packaged and consists of a programme and manual which work together to provide maximum benefits with ease of use.

It is already available in the leading retail computer chain outlets in the Dublin area. For information on availability throughout the rest of the country contact Dan O'Brien directly at 4 Chapel Lane, Killala or telephone 096 32130.



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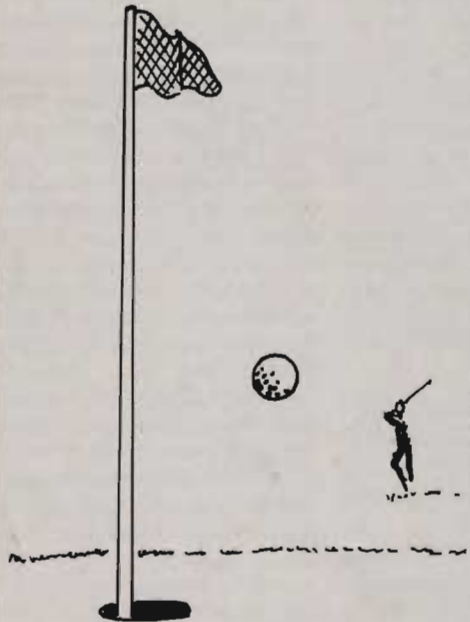
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BTU Golf Results



• Tony Delaney (Captain) with Eamonn McGrattan and David Sampson.



• Tony Delaney (Captain) with Michael Wyse and David Sampson.



• Tony Delaney with David Sampson.



• Matchplay Trophy Finalists: Pat Dunphy (left), winner with Tony Gillan, runner-up.

Sutton Outing

The marvellous weather at Sutton in September last was complemented by the highest quality of golf in the JJ Sampson & Son Ltd sponsored Matchplay Trophy final between Pat Dunphy and Tony Gillan. Sutton Golf Club being the venue witnessed Pat Dunphy the victor sinking a five foot putt on the 18th reflecting the calibre of the two finalists.

Prizes were presented by David Sampson representing the sponsors along with Plate Winner and BTU Captain Tony Delaney. An enjoyable dinner and aftermath was had by all and David has asked us to express his thanks to the BTU Committee/Organisers for their efforts, thus giving all concerned a successful and enjoyable day.

Sponsors — JJ Sampson & Son Ltd.

Matchplay Trophy

Winner: Pat Dunphy;
Runner Up: Tony Gillan.

Plate

Winner: Tony Delaney (41 pts.)
Runner Up: Michael Wyse (38 pts.);
3rd: Peter Johnson (37 pts.);

Front 9

1st: Eamonn McGrattan;
2nd: Cahal Connelly.

Back 9

1st: Eddie Egan;
2nd: John Lawler.

Guests

1st: Peter Reynolds (34 pts.);

Seasons Greetings

et al.: Irish H & V News

Seasons Greetings from All the Staff

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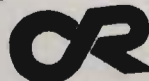
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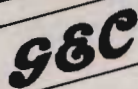
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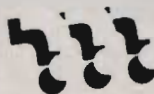


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
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Frank P. Cahill
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face to face

with Larry Clarke



• Pictured at the signing of a contract between SIPGAS and Ergas, were (left to right): Rowland Blennerhassett, Director SIPGAS/Managing Director, Kerry Petroleum Ltd; James Barber, Director SIPGAS/Chairman, South of Ireland Petroleum Ltd; Larry Clarke, General Sales Manager, Ergas Ltd, and Alan McLean, Chief Accountant, Ergas.

Getting it right second time 'round ... that would seem to be the case with Ergas Ltd following its very recent entré into the domestic home heating sector. Obviously, a great deal has changed within this marketplace since the turn of the decade and in that time Ergas has learned some valuable lessons since its first unfruitful foray into this field in 1979.

"Our approach was wrong at the time", admits General Sales Manager Larry Clarke. "I think in fact that we undervalued what it was we had to offer. At the time we fell into the trap of replacing oil with gas, converting systems already installed. This in effect meant that, while we did manage to turn many on to gas, the basic design of most of these systems was geared towards a totally different concept."

"The result was that we pulled out of the domestic central heating sector for a time. However, with the changing market situation of the last 12 months in particular, we decided to re-appraise our policy and came to the conclusion that, while we had little success in the past, we now felt we knew why."

"Hence, this time 'round we structured our domestic home heating package on the basis that we in Ergas had, because of its versatility and availability, a premium fuel source. We set out right from the outset with this in mind and did not fall in to the same trap as previously in '79 when we essentially undersold ourselves."

"We tailored our marketing and promotional strategies around the strength of our product, around the concept of our

own, specially-devised heating package; we did not allow the complaints or claims of other suppliers to influence what we did. Of course we were aware of them, and even evaluated what they were achieving but, in the final analysis we set out to simply sell what we had to offer, not to compete with anyone else."

"Even after only six weeks this strategy began to pay dividends. Of the 2,500 enquiries generated by our initial advertising campaign, we had over 200 systems fully installed and commissioned within a period of less than two months. Nonetheless, we regard this as but the first step in our intentions for this particular marketplace."

"Our plans are to develop the home heating sector as much as possible. We have

already spent £250,000 on promoting what we have to offer and, in investment terms for the coming 12 months, we envisage spending in the region of £1 million by way of tanks and installations.

"However, numbers is not our priority. We obviously want to make as many installations as possible but, the overriding element at all time is the safety factor. Hence our very structured and controlled policy with regard to our panel of installers. We went to great pains to select only the most competent and qualified engineers throughout the country and have even gone so far as to do without an appointee in a region in instances where we could find no one suitable enough to meet our exacting requirements.

"Our thinking on the matter is that the safety aspect is the most important, and indeed the most commercially viable route in the long run. Our appointed installers are also responsible for the after-sales service of each system so it is essential that we know we can rely on them to represent Ergas in the manner we desire. Let's face it — the installer is our front man out in the marketplace; he IS Ergas for all intents and purposes as far as the end-user is concerned.

"Nonetheless — and despite our diligence in this respect — we still took the further precaution of organising our installation/commissioning procedure around the fact that only an Ergas Engineering Inspector can give the final go ahead for a system to be switched on. To guarantee this occurrence, tanks supplied for home heating service are sealed in such a manner that it is only our own Inspector who can actually switch the system on. Once he has carried out his examination of the entire installation — and provided he is happy with the result — he then gives the final approval.

"Obviously, this is yet another very costly part of the service we offer but again we think it essential.

"As for the tanks themselves, the investment here is substantial given that each tank costs in the region of £500 a piece. We rent the tank to the customer for the nominal sum of £50 per year. The reason we don't sell the tanks is also based on safety. Approximately every five years the safety valves on this type of tank need changing. So, rather than trust in the customer to ensure that it's done, we retain responsibility for the tanks and can therefore guarantee that all necessary maintenance procedures are adhered to.

"Additionally, we supply every end-user with an advisory card for fixing in a prominent place. This lists the procedure to be followed, including who to contact, in the event of an emergency or even a minor

problem. On a day-to-day basis the appointed service engineer is responsible for everything in the house with regard to the installation, right out as far as the tank. Thereafter, we take over."

While the foregoing might suggest that Ergas encountered no problems and had all the answers before they set out, Larry Clarke says that nothing could be further from the truth. "However, where we got it right I think", he continued, "is that we recognised our shortcomings. We were fully aware that we knew very little about the appliance side or the installation aspects. We did know what we wanted in respect of the latter, but how to go about getting that in terms of the actual contractors was the problem.



• **Larry Clarke, General Sales Manager, ERGAS.**

"Consequently, we appointed Bob Couchman as Consultant Advisor to our new "home heat" marketing division. In addition to advising us in an overall context, he was ideally positioned to guide us with the appointment of installers and also to assist when it came to choosing appliance suppliers.

"Indeed, we were a little surprised when it came to dealing with appliance suppliers at how little they seemed to know about the technical aspects and finer features and requirements of products for this category. I'm not trying to suggest that all were like that, nor that we here at Ergas know any better. It's just that, given the vast potential the LPG home heating market offers, I expected more.

"As it is we have invited five companies to be our regular suppliers of appliances and these we chose having first investigated the diversity and quality of their product ranges. But again, just as with the panel of installers, it is not a 'closed' shop arrangement. We are always open to talking to anyone who can meet the requirement

and high standards — especially in terms of safety — that we demand.

"With regard to the supply and distribution of LPG itself we have also radically changed our approach. Traditionally, the methods used comprised tankers operating out of Dublin and supplying the end-user. However, given the scope of the many new home heating installations — and their geographical spread — a new concept had to be devised. Another reason was that, these customers expect a more immediate, short-term service in respect of placing an order for supplies.

"Consequently, what we now do is operate from central storage locations strategically located throughout the country. Given again that we are as yet only in the throes of establishing ourselves in this marketplace, the first such depot is already up and operational and located in Donegal. In effect, what we have is an appointed local distributor whose responsibility is to draw supplies from his central tank and deliver to those in his catchment area. This can be done at any interval. Our role is to keep him fully topped up with more pre-determined regular deliveries.

"Plans are at an advanced stage for other central tank locations with Ballyhaunis set to come on stream in March of next year; Tralee fully operational a few weeks before Christmas; and Galway also being worked on at present.

"This is a very novel approach compared with our competitors but, what's more important is that it emphasises once again the fact that not just Ergas, but the whole LPG home heating programme, is still very much in its infancy. There is still a vast educational requirement in respect of LPG for home heating and all the companies involved can only help one another with their respective promotional campaigns.

"We even benefit from natural gas promotions. As an LPG supplier, we are not in competition with the natural gas sector but rather complementary to it. Our respective potential market locations are very easily defined and do not encroach on one another. Indeed, I would see the ESB as being the main competitor for all of us."

This latter remark is especially important in that it amply illustrates Larry Clarke's view (and that of Ergas) of the potential of LPG in the home heating market sector. It is in effect that, while there will always be a certain amount of competition between individual companies, the potential is on such a scale that there is room for all if a co-ordinated marketing strategy — especially taking in every aspect of safety — is developed and implemented.

Time will tell.

ENERGY MANAGEMENT AWARDS

1986

Richard Bruton, Minister for State, Department of Energy, recently presented the Energy Management Awards for 1986 at a reception at IIRS. The Energy Manager of the year was John King of Avonmore Creameries Ltd.

The competition, which receives the cooperation and support of the Department of Energy and which is sponsored by the Electricity Supply Board this year, is designed to identify the most effective energy programmes and to reward their managers. It reflects a new impetus in the drive for more efficient use of energy by industry, commerce and the public sector.

These awards are designed to encourage the development of energy measurement and accounting in industry. There are three award categories and there are prizes for the first and second in each category. There is one overall award for the "Energy Manager of the Year". The main categories are — Energy Auditing; Monitoring and Target Setting; and Energy Saving through New Technology Applications.

On judging the entries, particular note was taken of the application of sound energy management principles and of the comparative size and resources of each entrant organisation. Entrants in large and small organisations have an equal chance of winning. In evaluating the entries, the following points were taken into consideration.

- Effective Energy Management with clear accountability for energy costs;
- Appropriate monitoring procedures;

WINNERS LIST

AWARD	COMPANY	ENERGY MANAGER
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Category A: Energy Auditing:

Winner	Trinity College Dublin	T.P. Cooper
2nd Place	Mid-Western Health Board	Gerard McNamara
Merit Awards	Telecom Eireann, Cork District	Kieran Maher
	Aer Rianta Dublin	Edward Brady

Category B: Energy Monitoring & Target Setting:

Winner	Avonmore Creameries Ltd.	John King
2nd Place	Irish Distillers Ltd, Midleton	Anthony Conboyne
Merit Awards	Aughinish Alumina Ltd.	Paul Hackett
	Allergan Ltd.	M. Silke

Category C: Energy Saving through New Technology Applications

Winner	Robert Jacob & Partners	Eamon O'Brien
2nd Place	True Temper Ltd.	D.W. O'Brien
Merit Awards	Hollister Overseas Ltd.	Oliver Finn
	Dublin Corporation,	P.D. Molumby
	Public Lighting Section	

OVERALL WINNER:

ENERGY MANAGER OF THE YEAR 1986

John King
Avonmore Creameries Ltd.

- Effective use of energy data and active energy control procedures;
- Use of target energy reductions and other motivational methods;
- The use of total approach to energy efficiency including management techniques and cost effective technology;
- Potential for replication elsewhere;
- Use of novel techniques;
- Achievement.



• Peter Brabazon, EMA Officer, East Region with Michael Riordan and Tom Cooper, Trinity College, Dublin, overall winner Section A, and Louis Healy, Head of Marketing, ESB.



• Eamon O'Brien, winner of Section C (from Robert Jacob & Partners) with Bill Nowlan, Irish Life; Robert Jacob, Principal, Robert Jacob & Partners; Brendan McLoughlin, ILAC Centre; and Louis Healy, Head of Marketing ESB.



• Pictured at the theatre of the Institute for Industrial Research Standards Glasnevin, Dublin recently were (from left) Minister for State at the Department of Energy, Richard Bruton, TD, presenting the Energy Manager of the Year 1986, John King, of Avonmore Creameries Ltd., Ballyragget, with his trophy. John also took premier place in section B. Also included are Keane Harley, (2nd left) ESB sponsors and Deputy Managing Director, Avonmore Creameries group.



• Dermot O'Brien, True Temper Ltd., Cork, 2nd, place Section C with Willie O'Byrne and Tony Conboye from Irish Distillers Ltd., Midleton, 2nd, place Section B, and Eugene O'Malley, EMA Officer, Cork.

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Co-Link[®]

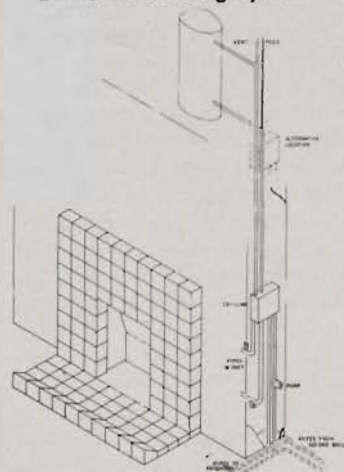


Developed in
conjunction with
Coal Information
Services.

These are some of the Co-Link special features:

- Tested over 2 years of field trials.
- Designed and made to the highest engineering standards.
- Compact size, roughly one foot square by six inches deep.
- Insulated Casing. The specially-finished outer casing encloses a layer of thermal insulation for extra efficiency.
- Simple Installation. Just fit it anywhere on the connections above the boiler and below the cylinder.
- Faster Warm-up. The Co-Link is designed with internal connections that greatly assist the gravity circulation when the pump is running. The neutral point remains at the boiler.
- Self-Supporting. The small, but heavy, Co-Link unit is provided with its own fixing bracket for any vertical surface.
- Extra Safety. The unique expansion vessel built into the Co-Link, while it may never be needed, is a most valuable safeguard for any domestic heating system.

The latest, best and cheapest
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boilers on the same
domestic heating system.

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Quality and Choice are Vital

BY LARRY CARR

Marketing any building-related product in the current economic climate requires a strong commitment and confidence in your product.

Since the beginning of this decade there has been a steady decline in the fortunes of the construction industry. The most recent statistics make depressing reading. July 1986 figures from the Central Statistics Office show that the numbers employed in building and construction were down 13% on July last year. The CSO figures also show that, compared to 1980, the total number employed in the industry has been halved.

Other indicators are equally black. Sales of cement have plummeted from 2.1m tonnes in 1979 to around 1.1m tonnes this year.

Nor is there any apparent silver lining ahead. The latest CIF/EEC survey states that the outlook for the residential building sector — the main market for rainwater systems — "indicates some renewed pessimism".

One of the indicators used in the survey is work in progress. In the residential building sector, work in progress went from 7.9 months of work in hand (December 1985) to 6.6 months (March 1986) and to 5.4 months at the end of June 1986.

Within this scenario the marketing of rainwater systems is intense. Setting up costs for the production of a complete system are extremely heavy. The extrusion and moulding of a range of fittings has to be carried out with detailed accuracy. As a result, only a handful of companies are capable of manufacturing.

Plastic systems dominate the market. The properties of PVC are particularly suited to controlling rainwater. PVC has strength and durability, it's light, easy to fix and can be manufactured in a range of colours. The fact that plastic rainwater systems never rot, dent, rust or require painting also contributes to their popularity.

Our rainwater system has been extremely popular for many years. Manufactured in Balbriggan, its success has been achieved by paying close attention to product innovation, development and quality. Continuous investment in plant and tooling underlines the confidence Wavin places in its future. This investment has resulted in continuous systems upgrading and the launch this month of a range of rainwater systems providing specifiers and contractors with an unrivalled choice of gutter sizes, profiles and gutters.

These innovations have been introduced to meet market needs. In recent years, there has been a trend towards rainwater systems which are not only functional but also aesthetically appealing. Specifiers are now seeking a greater choice in terms of shapes and colours.

years has been the availability of aluminium rainwater systems. They have made progress in the market, mainly due to their competitive price.

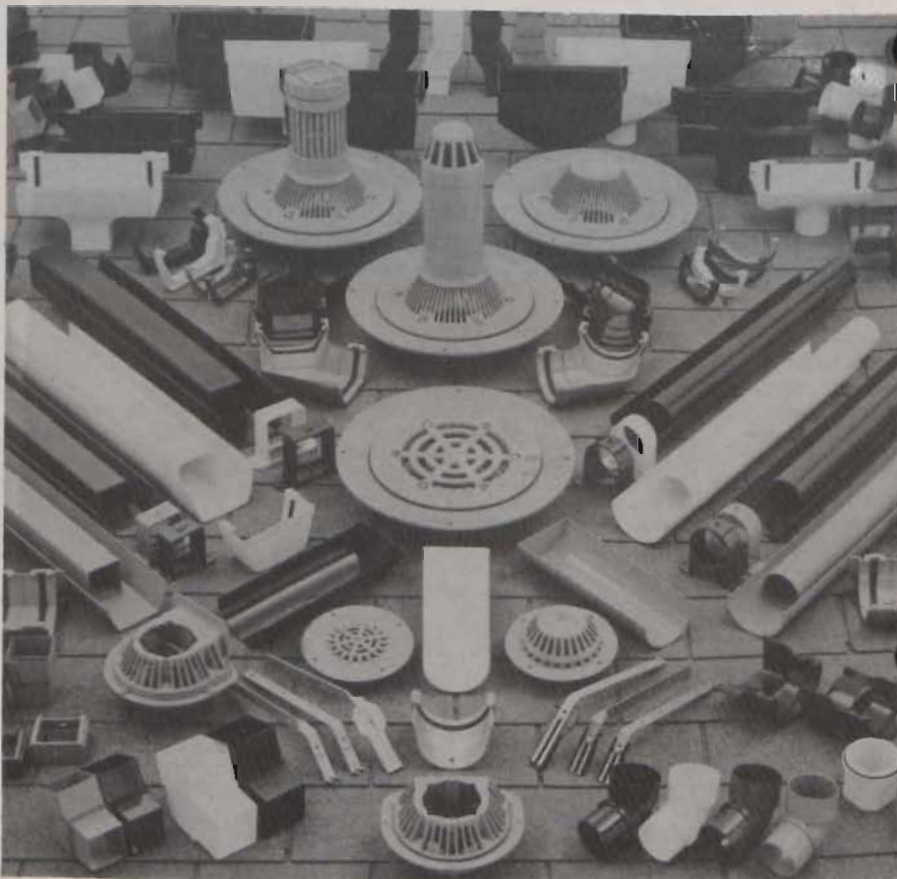
In the UK, where there are very strict standards, aluminium has not made the same impact. British standards for rainwater system are the bench mark used by PVC system manufacturers. All Wavin system are Kitemarked. It is this emphasis on quality plus providing a choice in relation to size, profiles and colours, which is vital in the rainwater market in Ireland.

Because the cost of a rainwater system is

negligible in relation to the overall cost of a new house, architects and builders can be more concerned with quality rather than with price. The intense competition in the market place ensures competitive pricing.

In a declining market the emphasis is producing and marketing rainwater systems must be on quality and choice. Those who provide a range of rainwater systems manufactured to the highest quality will maintain, and even improve their market position.

Larry Carr is Marketing/Sales Director, Wavin Ireland.



• Part of the extensive range of rainwater systems and roof and balcony outlets available from Unidare Terrain.

Unidare Terrain — unbeatable systems

Unidare Terrain rainwater systems are the result of extensive research into the design of UPVC systems and Terrain's many years of experience with drainage.

The systems are available in 110mm gutter and 69mm pipe in the half round system; 120mm gutter with 62mm pipe in the square section system; and 137mm gutter with 62mm and 75mm square and 82mm and 110mm round pipes in the large capacity system.

The systems are complementary to Unidare Terrain soil, waste and traps and buried drain systems. Integrated above and below ground drainage may thus be designed and specified in Terrain products.

The Unidare Terrain half round rainwater system complies with BS 4576 and, where applicable, bears the Kitemark. There are no British Standards for square section rainwater systems or roof and balcony outlets.

New Streamline storms ahead of the rest.



TERRAIN
SOIL-WASTE-RAINWATER-BURIED DRAIN

The Unbeatable Systems.

UNIDARE plc. Jamestown Road, Finglas, Dublin 11. Telephone: 771801. Telex: 25141.

Pipe, gutter and fittings are manufactured in UPVC, 2100 and 2200 systems are manufactured in grey, black, white and rustic brown and the 2300 system in black and white. Roof and balcony outlets are only available in grey.

All Unidare Terrain rainwater systems are completely dry-jointed with no lubricant being required. The full size gutter seals are retained in their own groove by the gutter while every gutter fitting has separate retaining clips which give easy clip-on assembly and equally easy disassembly.

All gutter fittings are anchored with every cut edge being masked making all joints neat and tidy. Every pipe fitting has a standard groove for bracket security, and

screws, which are all that are needed for fixing fascia brackets, are outside the wet area.

Offsets are made of pipes and bends which reduces stocking levels.

Handling — Reasonable care should be exercised in handling UPVC, particularly in very cold conditions. Loading and unloading of loose pipes should be carried out by hand. If mechanical handling is used, chains and hooks should be avoided.

Storage — Pipe should be stacked on a flat base or level ground or alternatively on 75mm x 75mm timber at 1.5m maximum centres. Side support should be provided by 75mm wide battens at 1.5m intervals.

Pipe should be stacked not more than

seven layers high.

Pipe stacks should contain one diameter size only. If this is not possible the largest diameter should be the lowest. Small pipes may be nested inside larger pipes.

When stored in the open for long periods or exposed to strong sunlight the stack should be sheeted with an opaque material.

Fittings should be stored under cover and kept in their cartons or packing until required.

Further details are available from Unidare Terrain, Jamestown Road, Finglas, Dublin 11, (Tel: 771801); Telex: 25141.

Wavin - Unrivalled Choice

The launch this month of the Wavin Osma rainwater systems unveiled an unrivalled range of rainwater systems to the Irish market. The systems include a wide selection of gutter sizes, profiles and colours. Manufactured to the highest Wavin standards, the systems are easy to fix and include many fittings which are unique to Wavin.

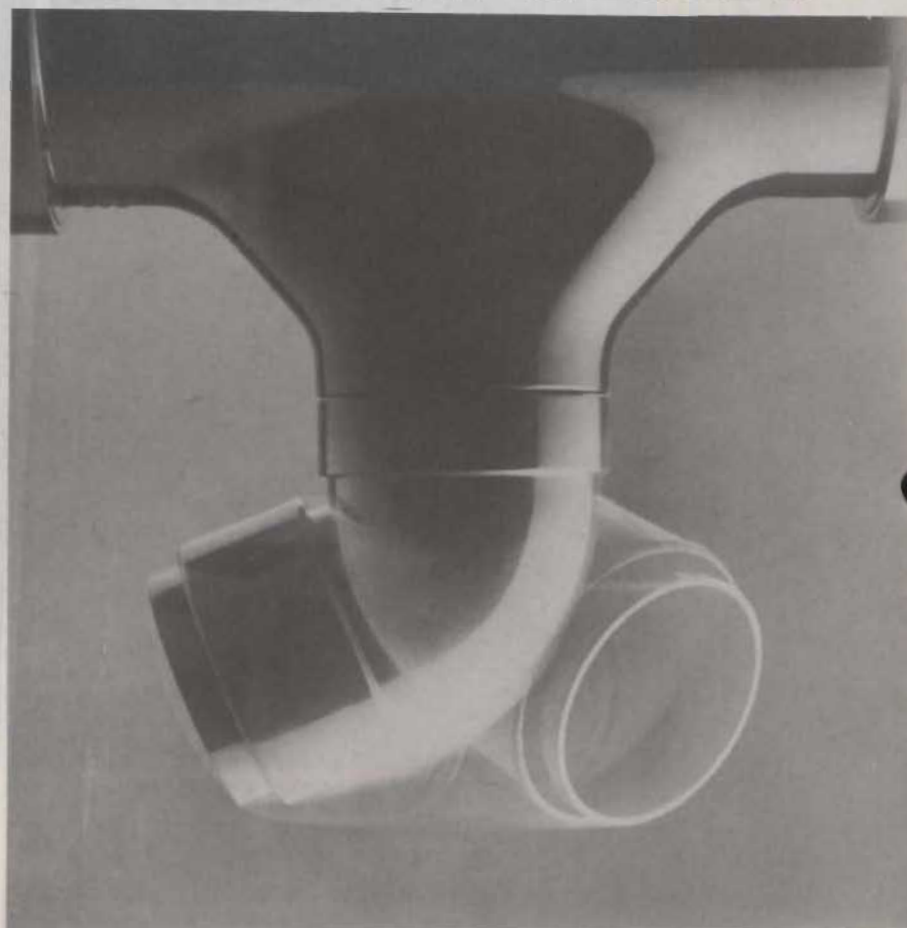
There are four systems available — Roundline, Squareline, Superline and Roofline.

Roundline — Roundline has a nominal half-round gutter of 112mm (4½") with 68mm (2½") downpipes. The system is Kitemarked and has a comprehensive range of fittings. These include a unique Swivelock running outlet, connectors to traditional materials and a variety of brackets for installation on buildings with or without a fascia board. Roundline is available in black, brown, white and grey.

Squareline — Squareline is a rectilinear rainwater system with 100mm (4") gutters and 61mm (2½") square pipes. It is particularly suitable for 'period' or up-market dwellings where appearance is important. Squareline complements and enhances the eaves detail and is available in black, brown or white to perfectly match the style of the building.

Superline — Superline is a high-capacity, rapid-draining rainwater system designed for use on large roofed dwellings, domestic terrace blocks and small commercial units. Superline features nominal half-round gutters of 125mm (5") and standard Roundline 68mm (2½") downpipes. This combination is possible because of the unique Hydrodynamic outlet which accelerates the flow of water from the gutter into the downpipe. Superline is Kitemarked and is available in black and brown.

Roofline — Roofline is a very large

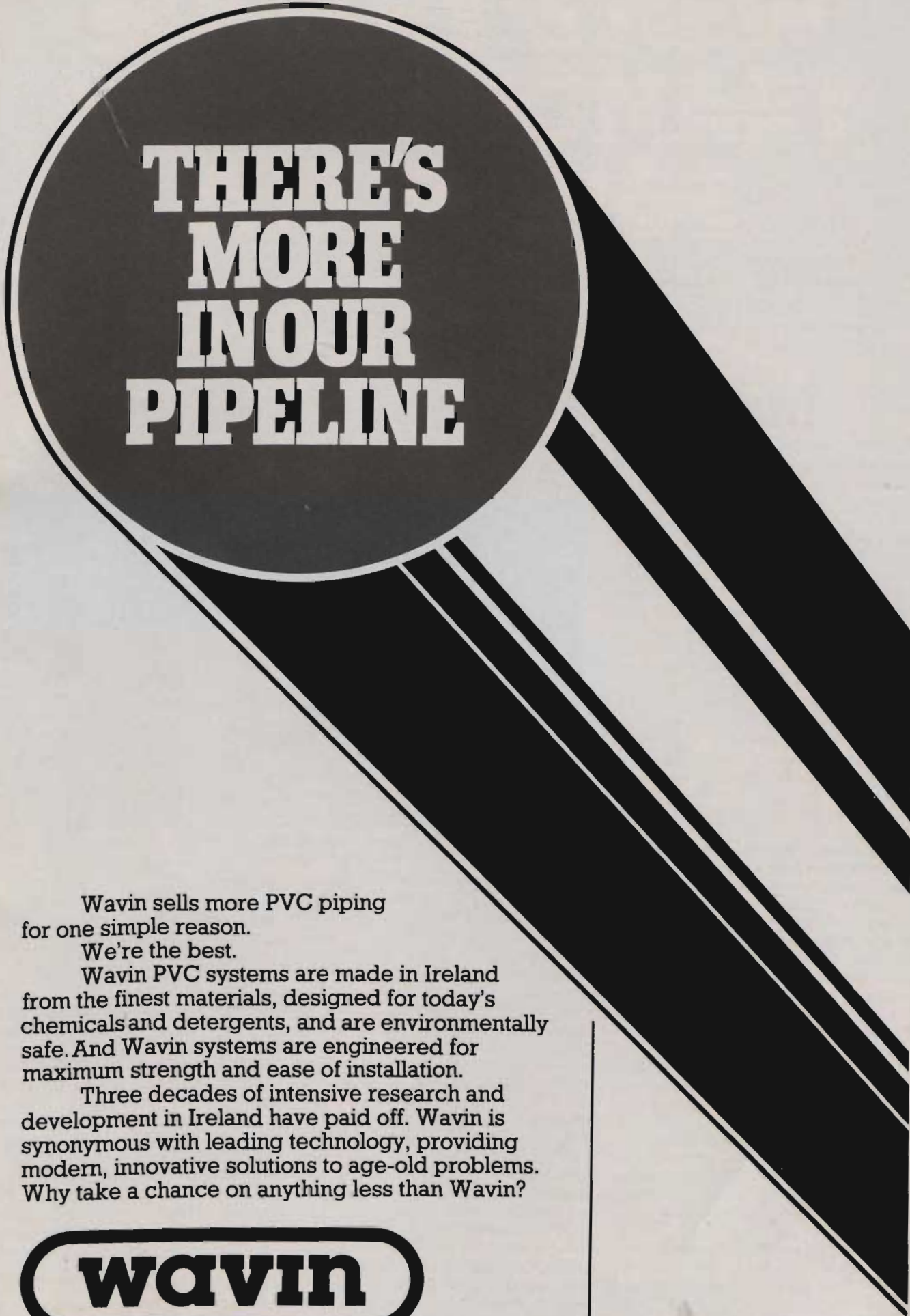


• Unique Wavin Osma swivelock outlet.

capacity rainwater system with 150mm (6") nominal half-round gutters and 110mm (4") down pipes. It has been designed for large industrial, commercial and agricultural buildings. The Flexiclip gutter

jointing system makes installation easy, despite the large size of the fittings.

Swivelock — All Wavin products are produced to the highest technical and design standards. The Wavin Osma




THERE'S MORE IN OUR PIPELINE

Wavin sells more PVC piping
for one simple reason.

We're the best.

Wavin PVC systems are made in Ireland
from the finest materials, designed for today's
chemicals and detergents, and are environmentally
safe. And Wavin systems are engineered for
maximum strength and ease of installation.

Three decades of intensive research and
development in Ireland have paid off. Wavin is
synonymous with leading technology, providing
modern, innovative solutions to age-old problems.
Why take a chance on anything less than Wavin?

**wavin**

There's more in our pipeline!

rainwater systems includes a patented Swivelock Outlet, probably the most revolutionary design feature introduced into uPVC rainwater systems.

This "hydrodynamic" outlet solves the unsightly problem of affect bends coming apart from the outlet or slipping as a result of the weight of the offset assembly or by movement caused by expansion and contraction.

The offset is permanently attached to the outlet, but can swivel in any direction to enable a simple offset connection to be made to the downpipe, even when it is not in line with the outlet.

The principle of the Swivelock outlet is

that water being collected by a larger gutter can be drained into a standard downpipe provided the shape of the outlet is redesigned. The Wavin Swivelock Outlet has a funnel-shaped throat which accelerates the flow of water into the downpipe. This is a major saving in cost as it is often possible to reduce the number of downpipes required.

Fitting — Incorporated in all Wavin Osma gutter fittings is the unique Flexiclip joint. Fixing is simple as it is only the clip that is flexed rather than the whole fitting of the gutter. This ensures an easy, positive, permanently watertight joint everytime.

Wavin Osma Rainwater Systems also include a range of brackets for unusual applications. The Wavin Osma Rainwater

Systems are supported by a comprehensive advice service on all aspects of performance, systems, planning and installation.

"Only top quality uPVC is used in the manufacture of Wavin Osma Rainwater systems", said Wavin's Sales and Marketing Director, Larry Carr. "With Wavin Osma rainwater systems readily available through a network of builders providers, co-ops and hardware stores throughout the country, specifiers and users are guaranteed the type of service and support they should expect from a market leader with a quality product".

Further details from Wavin Ireland Ltd., Balbriggan, Co. Dublin, (Tel: 412260).

Marley - Suiting Every Need

Whatever the architectural style or physical requirements, there is a Marley eaves gutter system to suit every building. Marley Flooring & Plumbing Ltd of Lucan, Co Dublin, provide four complete systems — Half Round, Deepflow, Flowline and Classic — together with a full technical advisory service, so Marley have the answer for all rainwater problems. The Half Round, Deepflow and Flowline systems are all manufactured in Lucan by Marley Extrusions Ireland Ltd and carry the guaranteed Irish symbol.

Marley Half Round: The Marley Half Round eaves gutters in UPVC offer three complete systems: 100mm (4") gutter with 68mm pipe; 125mm (5") gutter with 68mm or 81mm pipe; and 150mm (6") gutter with 110 pipe.

All three systems now offer a choice of black or grey.

The 4" and 5" gutters use the well-proven Marley Gutter Joint with separate jointing strap located between notches on the spigot and socket. The strap compresses the gutter spigot down against the synthetic rubber seal which is secured in every socket. When correctly assembled the joint cannot pull apart and it will absorb the expansion and contraction of the gutter while maintaining a watertight seal.

Marley Deepflow: The Marley Deepflow system is a 110mm x 75mm deep semi-elliptical UPVC gutter designed to produce improved gutter jointing, better self cleansing flow characteristics and increased capacity.

Deepflow gutters are joined by the spigot, synthetic rubber seal and socket method and two system of UPVC downpipes and fittings are available: a circular 68mm range and a 65mm square design, both in white, grey or black.

The dimensions of the Deepflow gutter produce a maximum flow capacity equivalent to that of a 150mm nominal half round gutter.

Marley Flowline: Marley Flowline presents all the same practical benefits as Marley Deepflow in reducing the number of rainwater pipes required on each



Jim Mitchell, Minister for Communications with Fergus Malone and Dudley Foster, both of Marley, pictured during the recent Marley open days.

installation, with consequent savings in the cost of underground drainage pipework. In addition, Marley Flowline incorporates an improved jointing system.

The well-proven notch technique is preserved to control thermal movement of assembled lengths of gutter, but separate gutter straps are replaced by integral retaining nibs on injection moulded fittings. A synthetic rubber seal is fitted in a deep moulded recess within the socket of gutter fittings, and no adhesive is required to secure the flexible seal in position.

The 116mm x 60mm deep box-gutter shape of Marley Flowline provides engineers and builders with a choice of profile and also produces a maximum flow capacity of 1.33 litres/second when fitted level with an outlet at one end.

Marley Flowline gutters, 65mm square and 68mm circular downpipes and fittings are available in brown, black, grey or white.

Marley Classic: By virtue of its 120mm x 75mm deep basic box section, the UPVC Marley Classic gutter system is complementary to Marley Flowline. However, its moulded 'ogee' style front offers an architectural effect that is much in

demand.

The complex shape makes the compression method of jointing unsuitable and moulded gutter fittings therefore have short solvent weld sockets which provide slots to receive spigot ends of gutters.

Special consideration must be given to accommodate thermal movement of the solvent welded gutter assembly. This is achieved by ensuring that stopends are free to move and by fitting the appropriate number of expansion unions. Provision for expansion and contraction must be provided between all fixed points where the gutter length exceeds 3 metres, and an expansion union must always be located between two outlets irrespective of distance.

Marley Classic gutters and fittings are available in black or white and can be used in conjunction with either the 65mm square or 68mm circular range of downpipes and fittings.

Marley Service: Detailed product brochures on all Marley systems and a full technical advisory service are available from Marley Flooring & Plumbing Ltd., Lucan, Co. Dublin, Tel: 01-280691; Telex: 25155.

MARLEY'S NEW REVOLUTIONARY A.J. RANGE

DEVELOPED
& MANUFACTURED
IN IRELAND



ADVANCED FLOW CHARACTERISTICS

Eliminates potential blockage points.

COMPREHENSIVE RANGE

14 standard A.J.'s with risers and cover.

ADJUSTABLE HEIGHT

Risers facilitate height adjustment from 280mm to 584mm.

SIMPLIFIED ALIGNMENT

Top may be swivelled to align with house walls and paving.

THE NEW MARLEY A.J. COVER

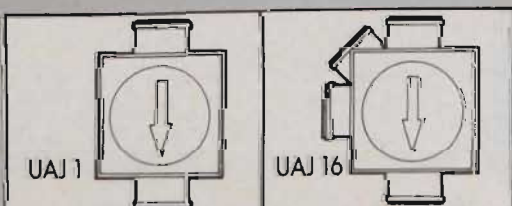
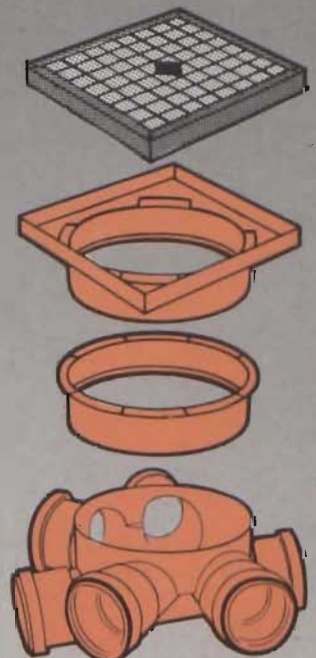
Designed to fit all standard A.J.'s. May be screw fixed with Marley A.J.'s. Suitable for light traffic areas.

QUALITY FINISH

A consistently high standard of installation and finish can easily be achieved.

EXTRA PROTECTION FOR TRIBUTARY PIPES

Minimum cover to pipes entering side connections of a basic Marley A.J. is 120mm.

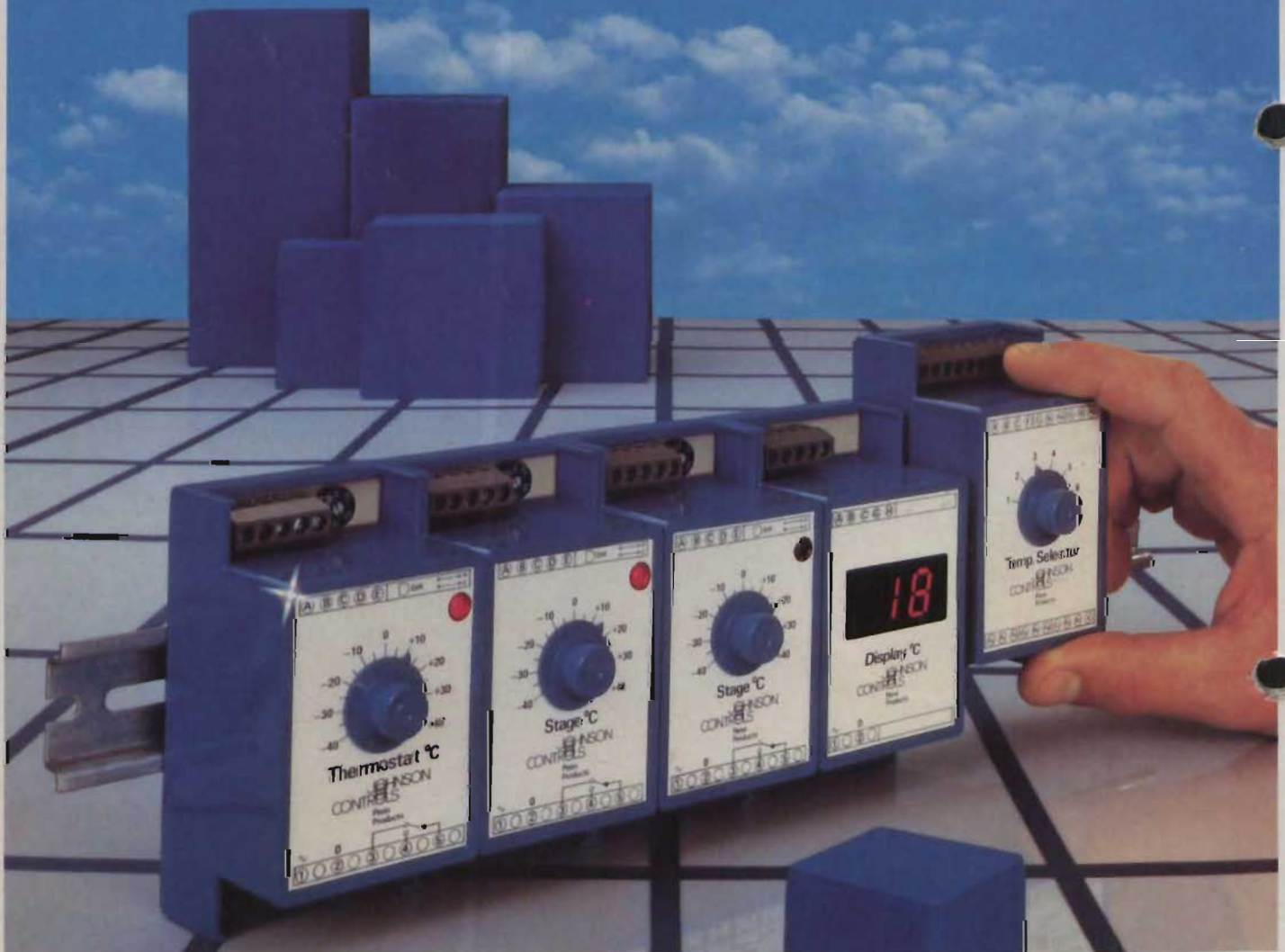


Marley Plumbing



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THE MODULAR SYSTEM FOR INDIVIDUAL CONTROL REQUIREMENTS



System 27 is a new configuration in electronic temperature and humidity control.

This system gives you flexibility in choosing a more customized control set up.

Compose either a simple or a complicated control scheme. The

modules within **System 27** each have their own specific function.

It is the fashion in which they can be combined that allows for different control configurations.

Anything between a simple thermostat or humidistat and a multiple staging

control with digital read-out of process variables is possible.

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